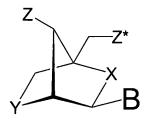
Docket No.: 58614(71432)

AMENDMENTS TO THE CLAIMS

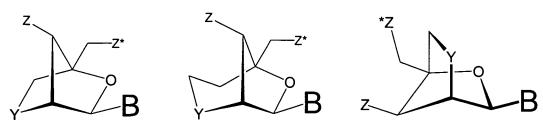
- 1. (Cancelled)
- 2. (Previously Presented) A compound of claim 91, which modulates the expression of thioredoxin.
- 3. (Canceled)
- 4. (Previously Presented) The compound according to claim 91, which is an antisense oligonucleotide.
- 5. (Previously Presented) The compound according to claim 91, comprising at least one nucleotide analogue.
- 6. (Previously Presented) The compound according to claim 91, comprising at least one Locked Nucleic Acid (LNA) unit.
- 7. (Previously Presented) The compound according to claim 6, wherein the Locked Nucleic Acid (LNA) unit has the structure of the general formula



X and Y are independently selected among the groups -O-, -S-, -N(H)-, N(R)-, -CH₂- or -CH₂- (if part of a double bond), -CH₂-O-, -CH₂-S-, -CH₂-N(H)-, -CH₂-N(R)-, -CH₂-CH₂- or -CH₂-CH₂- (if part of a double bond), -CH=CH-, where R is selected form hydrogen and C_{1-4} -alkyl; Z and Z* are independently absent, selected among an internucleoside linkage, a terminal group or a protecting group;

B constitutes a natural or non-natural nucleobase; and the asymmetric groups may be found in either orientation.

8. (Original) The compound according to claim 6 or 7, wherein at least one nucleotide comprises a Locked Nucleic Acid (LNA) unit according any of the formulas



wherein Y is independently selected from -O-, -S-, -NH-, and N(RH);

Z and Z* are independently absent, selected among an internucleoside linkage, a terminal group or a protecting group; and

B constitutes a natural or non-natural nucleobase.

9. (Previously Presented) The compound according to claim 91, wherein the nucleotide analogue comprises an internucleoside linkage selected from the group consisting of $-O-P(O)_2-O-$, -O-P(O,S)-O-, $-O-P(O)_2-O-$, $-S-P(O)_2-O-$, $-S-P(O)_2-O-$, $-O-P(O)_2-S-$, -O-P(O,S)-S-, $-S-P(O)_2-S-$, $-O-PO(R^H)-O-$, $-O-PO(OCH_3)-O-$, $-O-PO(NR^H)-O-$, $-O-PO(OCH_2CH_2S-R)-O-$, $-O-PO(BH_3)-O-$, $-O-PO(NHR^H)-O-$, $-O-PO(OCH_3CH_2S-R)-O-$, where R^H is selected form hydrogen and C_{1-4} -alkyl.

10. - 13. (Cancelled)

- 14. (Previously Presented) The compound according to claim 413, wherein the antisense oligonucleotide is a gapmer.
- 15. (Currently Amended) The compound according to claim 91, wherein the antisense oligonucleotide compound is a 13, 14, 15, 16, 17, 18, 19, 20 or 21-mer in length.
- 16. (Currently Amended) The compound according to claim 91, comprising at least 2 LNA units, such as 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 or 21 LNA units.

17. - 46. (Cancelled)

- 47. (Currently Amended) A conjugate comprising the compound according to claim <u>9</u>1 and at least one non-nucleotide or non-polynucleotide moiety covalently attached to said compound.
- 48. (Currently Amended) A pharmaceutical composition comprising a compound as defined in claim Currently Amended 91 or a salt thereof or a conjugate as defined in claim 47, and a pharmaceutically acceptable diluent, carrier or adjuvant.
- 49. (Previously Presented) The pharmaceutical composition according to claim 48, further comprising at least one chemotherapeutic agent.
- 50. (Previously Presented) The pharmaceutical composition according to claim 49, wherein said chemotherapeutic compound is selected from the group consisting of adrenocorticosteroids, such as prednisone, dexamethasone or decadron; altretamine (hexalen, hexamethylmelamine (HMM)); amifostine (ethyol); aminoglutethimide (cytadren); amsacrine (M-AMSA); anastrozole (arimidex); androgens, such as testosterone; asparaginase (elspar); bacillus calmette-gurin; bicalutamide (casodex); bleomycin (blenoxane); busulfan (myleran); carboplatin (paraplatin); carmustine (BCNU, BiCNU); chlorambucil (leukeran); chlorodeoxyadenosine (2-CDA, cladribine, leustatin); cisplatin (platinol); cytosine arabinoside (cytarabine); dacarbazine (DTIC); dactinomycin (actinomycin-D, cosmegen); daunorubicin (cerubidine); docetaxel (taxotere); doxorubicin (adriomycin); epirubicin; estramustine (emcyt); estrogens, such as diethylstilbestrol (DES); etopside (VP-16, VePesid, etopophos); fludarabine (fludara); flutamide (eulexin); 5-FUDR (floxuridine); 5-fluorouracil (5-FU); gemcitabine (gemzar); goserelin (zodalex); herceptin (trastuzumab); hydroxyurea (hydrea); idarubicin (idamycin); ifosfamide; IL-2 (proleukin, aldesleukin); interferon alpha (intron A, roferon A); irinotecan (camptosar); leuprolide (lupron); levamisole (ergamisole); lomustine (CCNU); mechlorathamine (mustargen, nitrogen mustard); melphalan (alkeran); mercaptopurine (purinethol, 6-MP); methotrexate (mexate); mitomycin-C (mutamucin); mitoxantrone (novantrone); octreotide (sandostatin); pentostatin deoxycoformycin, nipent); plicamycin (mithramycin, mithracin); prorocarbazine (matulane); streptozocin; tamoxifin (nolvadex); taxol (paclitaxel); teniposide (vumon, VM-26); thiotepa;

topotecan (hycamtin); tretinoin (vesanoid, all-trans retinoic acid); vinblastine (valban); vincristine (oncovin) and vinorelbine (navelbine).

51.-52 (Canceled)

53. (Previously Presented) A pharmaceutical composition comprising the compound of claim 91, which is constitutes a pro-drug.

54. (Currently Amended) A pharmaceutical composition comprising the compound of claim 91, which further comprises an antiinflamatory anti-inflammatory compounds and/or antiviral compounds.

55. – 63. (Cancelled)

64.-74. (Canceled)

75. (Cancelled)

76.-90. (Canceled)

91. (Currently Amended) A compound consisting of a total of 12-50 nucleotides and/or nucleotide analogues, wherein said compound comprises a subsequence of at least 8 nucleotides or nucleotide analogues, said subsequence comprising at least an 8-nucleobase portion of being located within the sequence caaggaatatcacgtt (SEQ ID NO:8) and wherein at least one of said nucleotides in said sequence has been replaced by a corresponding nucleotide analogue, having the same nucleobase, and wherein said nucleotide analogue is selected from the group consisting of LNA sugar, 2'-O-methyl RNA sugar, 2'-fluoro DNA sugar, 2'-MOE RNA sugar, 2'-O-(3-amino)propyl RNA sugar and 2'-O-(3-hydroxy)propyl RNA sugar.

92. (Canceled)

- 93. (Currently Amended) The compound of claim 92, wherein said eorresponding nucleotide analogue is LNA.
- 94. (Previously Presented) The compound of claim 93, wherein said LNA is selected from the group consisting of thio-LNA, amino-LNA and oxy-LNA.
- 95. (Previously Presented) The compound of claim 94, wherein said LNA is beta-D-oxy-LNA.
- 96. (Currently Amended) The compound of claim 91, wherein said compound comprises a subsequence of at least 12 nucleotides or nucleotide analogous analogues.
- 97. (Currently Amended) The compound of claim 91, wherein said compound consists of <u>a total</u> of 12-20 nucleotides and/or nucleotide analogues.
- 98. (Previously Presented) The compound of claim 91, wherein said compound comprises the sequence CAAGgaatatcaCGTT (SEQ ID NO:151) or CAAGgaatatcaCGTt (SEQ ID NO:152), wherein uppercase letters denote a beta-D-oxy-LNA and lowercase letters denote a DNA sugar, and wherein said nucleotides and/or nucleotide analogues are linked together by a phosphate group, a phosphorothioate group, or a combination thereof.
- 99. (Previously Presented) The compound of claim 98, wherein said compound comprises the sequence C_SA_SA_SG_Sg_Sa_Sa_St_Sa_St_Sc_Sa_SC_SG_ST_ST(SEQ ID NO:77), wherein uppercase letters denote a beta-D-oxy-LNA and lowercase letters denote a DNA sugar, and wherein the subscript "s" denotes a phosphorothioate linkage.
- 100. (Previously Presented) The compound of claim 98, wherein said compound consists of the sequence $C_SA_SA_SG_Sg_Sa_Sa_St_Sa_St_SG_SG_ST_ST(SEQ ID NO:77)$, wherein uppercase letters denote a beta-D-oxy-LNA and lowercase letters denote a DNA sugar, and wherein the subscript "s" denotes a phosphorothioate linkage.

- 101. (Previously Presented) The compound of claim 98, wherein said compound comprises the sequence C_OA_OA_OG_Og_Sa_Sa_St_Sa_St_Sc_Sa_SC_OG_OT_OT(SEQ ID NO:79), wherein uppercase letters denote a beta-D-oxy-LNA and lowercase letters denote a DNA sugar, and wherein the subscript "s" denotes a phosphorothioate linkage and the subscript "o" denotes a phosphate linkage.
- 102. (Previously Presented) The compound of claim 98, wherein said compound consists of the sequence C_OA_OA_OG_Og_Sa_Sa_St_Sc_Sa_SC_OG_OT_OT (SEQ ID NO:79), wherein uppercase letters denote a beta-D-oxy-LNA and lowercase letters denote a DNA sugar, and wherein the subscript "s" denotes a phosphorothioate linkage and the subscript "o" denotes a phosphate linkage.
- 103. (Previously Presented) The compound of claim 98, wherein said compound comprises the sequence $C_SA_SA_SG_Sg_Sa_Sa_St_Sa_St_SG_SG_ST_St$ (SEQ ID NO:78), wherein uppercase letters denote a beta-D-oxy-LNA and lowercase letters denote a DNA sugar, and wherein the subscript "s" denotes a phosphorothioate linkage.
- 104. (Previously Presented) The compound of claim 98, wherein said compound consists of the sequence C_SA_SA_SG_Sg_Sa_Sa_St_Sc_Sa_SC_SG_ST_St (SEQ ID NO:78), wherein uppercase letters denote a beta-D-oxy-LNA and lowercase letters denote a DNA sugar, and wherein the subscript "s" denotes a phosphorothioate linkage.
- 105. (Currently Amended) The compound of any of claims 9198-104, wherein LNA cytosine (C) is LNA 5' methyl cytosine (5-MeC).